Number Seven — 1977

THE LORAM STORY

Featuring Techman Ltd.

Message from Management

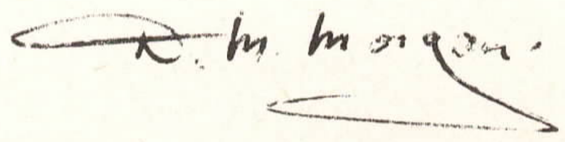
D. M. MORGAN
President
Techman Ltd.

Since the last time I had the pleasure of writing a similar message to all my colleagues, associates and those of our clients whom this magazine reaches, many changes have come about within the Techman organization.

In particular we have grown. Our staff has increased and so have the services that we offer. At the time of writing our total staff is close to 80 and still growing as we are heavily engaged in projects involving coal mining, coal preparation, pipeline and environmental work.

This growth has only been possible because of two factors. The first is people. Consulting engineering companies have nothing to offer but people and the success of a company is largely dependent on the dedication, ability, and effort made by the people working for the company. Certainly in the recent past all of the people who work for Techman have been called upon for more than the usual measure of dedication and effort and they have responded fully. The second factor is the support received from our parent organization and associated companies. We have been encouraged by the confidence that has been demonstrated by the large volume of new work we have received from these sources and look forward to a continuation of this mutually advantageous arrangement.

Turning to the future, we are confident we can continue to grow but we are aware that, against the general economic situation, this growth may be harder to achieve than in the recent past and that we may have to look for new work in other geographical areas than in the past.



THE LORAM STORY

Vol. 25 1977 No. 7

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Front Cover

Harmony between man and nature is maintained by Techman in this mine development (lower right hand corner of the photograph) in the Canadian Rockies.

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Techman Ltd.

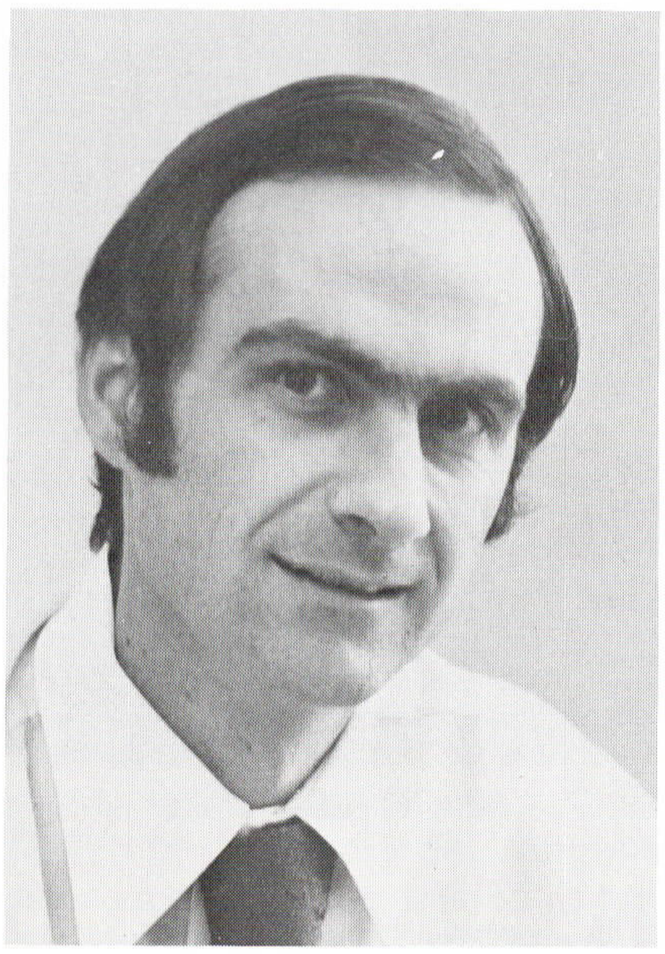
Engineering & Environmental Sciences

Techman Ltd. is the engineering and environmental sciences company of the Loram Group. It provides a wide range of consulting services based on many years of mining pipeline, railway and environmental experience. The company has worked from the Arctic regions of Canada to Jamaica, South America, Australia, Africa and the Indian sub-continent.

Formed in 1969, Techman's clients include mining and transportation companies, governments, oil and gas companies. The services provided encompass planning, engineering and design as well as the areas of environmental concern and land use studies.

D. F. Smith, Manager, Development

In the area of coal mining, Techman provides engineering consulting services on a world-wide basis to exploration companies, owners, producers and users of coal. These services include outlining drilling programs, analyzing and defining the data required for preparation plants designing flowsheets, producing general arrangement and other drawings of the proposed plants, and developing investment cost estimates. Expertise extends into both the metallurgical and thermal coal fields as well as areas such as



C. B. Boyer, Controller

methane drainage, coal preparation for gasification, slurry pipelines, briquetting, charring and to some extent assessing coking and burning characteristics of coal.

Techman's environmental qualifications are based on personnel experienced in fields of terrestrial and aquatic ecology, geography, geology, economics and geotechnical engineering. Additional expertise, in such fields as socio-economics, archaeology and air quality is integrated as project needs indicate.

In the area of pipelining, Techman offers a complete range of services for new pipeline projects, from the conceptual stage through to the installation and operation of a pipeline system.

Techman's staff are currently mainly involved with feasibility studies, location, engineering and design of several pipeline systems.

C. J. Abbott, Manager
Mine Planning & Special
Studies Group

Techman uses the powerful Honeywell 6610 computer system at the Head Office building. The hardware configuration includes 512,000 characters of memory, floating point processor, 400 million characters of on-line, high-speed disk storage, high-speed magnetic tape transports and a high-speed printer. Communications capabilities are provided for on 10 direct access ports and two high-speed data communications lines. Processing capabilities cover all

areas of time sharing and batch processing. Project cost planning, cost control, estimating, scheduling and site coordination are all performed with the aid of this in-house computer system and programs.

E. Polloway, Manager, Pipeline Group

Techman's President, D. M. Morgan joined the Loram Group in 1974. He has more than 30 years' experience in mine exploration, engineering and production. He has held supervisory and executive positions with companies in Ghana, India, Tanganyika, and Canada.

Vice-President, Engineering is J. G. Bruce, a professional engineer who joined the Loram Group in 1948. Vice-President, Operations, E. J. Blazenko joined the Group in 1971 as Environmental Geologist with Techman Ltd. Manager, Development is D. F. Smith; Controller is C. B. Boyer; Manager, Mine Planning & Special Studies Group is C. J. Abbott; E. Polloway is Manager, Pipeline Group and B. W. Raymond is Manager, Coal Group.

B. W. Raymond, Manager, Coal Group

Techman is registered with the Association of Professional Engineers, Geologists & Geophysicists of Alberta, is a member of the Association of Consulting Engineers of Canada, and the Engineering Institute of Canada.

Elk Island National Park Study

Buffalo herd with calves, typical of conditions under which Techman's survey was conducted.

In 1977, Techman's Environmental Division began a two-year study of environmental relationships of the vegetation at Elk Island National Park. The objectives of this investigation were not only to inventory and to map existing vegetation patterns within the park, but also to provide interpretation of this information in light of ongoing master planning by Parks Canada personnel.

Techman biologists and geographers completed the first phase of their field program this fall. The work was oriented toward describing different vegetation types, and their distributions, and toward discovering the soil types, moisture regimes, and other factors which regulate these distributions. Next season's efforts will be aimed at evaluating the effects of hiking, camping and other types of human use, studying sites with interest for future naturalist's interpretive programs, and at evaluating environmental sensitivities of vegetation types with regard to specific park developments.

This study is being funded by Parks Canada and is part of a comprehensive program of environmental analyses that will be undertaken in all Western Canadian National Parks. This, and similar research being conducted elsewhere, is critical to Parks Canada because it informs park managers of resources available for public use, and it gives them much needed technical information for wise management of these resources for future generations.

Example of lake margin community found in Elk Island National Park.

Two New Appointments Announced

Two new appointments were recently announced by D. M. Morgan, President of Techman Ltd.

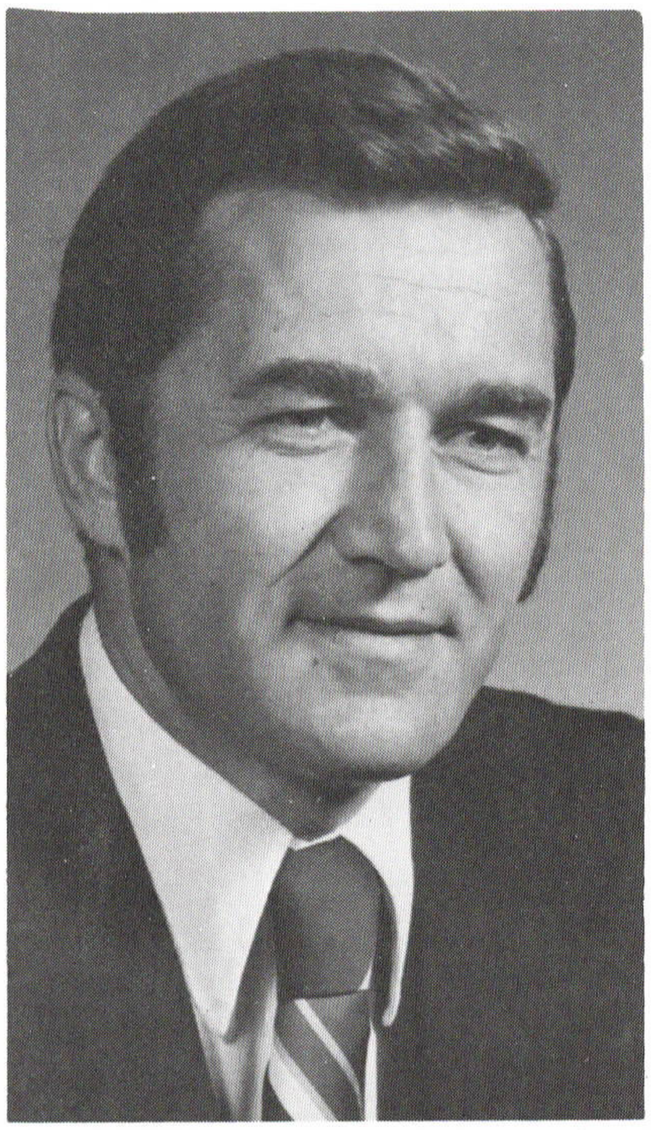
J. G. Bruce, formerly Manager, Operations, has been appointed Vice-President, Engineering and E. J. Blazenko, formerly Manager, Environmental Group, has been appointed Vice-President, Operations.

J. G. Bruce, Vice-President, Engineering

Mr. Bruce joined the Loram Group of Companies in 1948 and was employed by Loram International Ltd. until 1969. During that time, he held management and engineering positions, travelling extensively in Canada, the United States and Australia. He joined Techman Ltd. in 1969 as Division Manager, a position he held until 1972 when he became Manager, Operations, responsible for the coordination of all Techman engineering activities.

Mr. Bruce received his B.A. Sc. degree in Mechanical Engineering from the University of British Columbia in 1953. He is a member of the Engineering Institute of Canada, a member of the Canadian Society of Mechanical Engineers, a member of the Association of Professional Engineers, Geologists & Geophysicists of Alberta and a member of the Woodlands Section, Canadian Pulp & Paper Association.

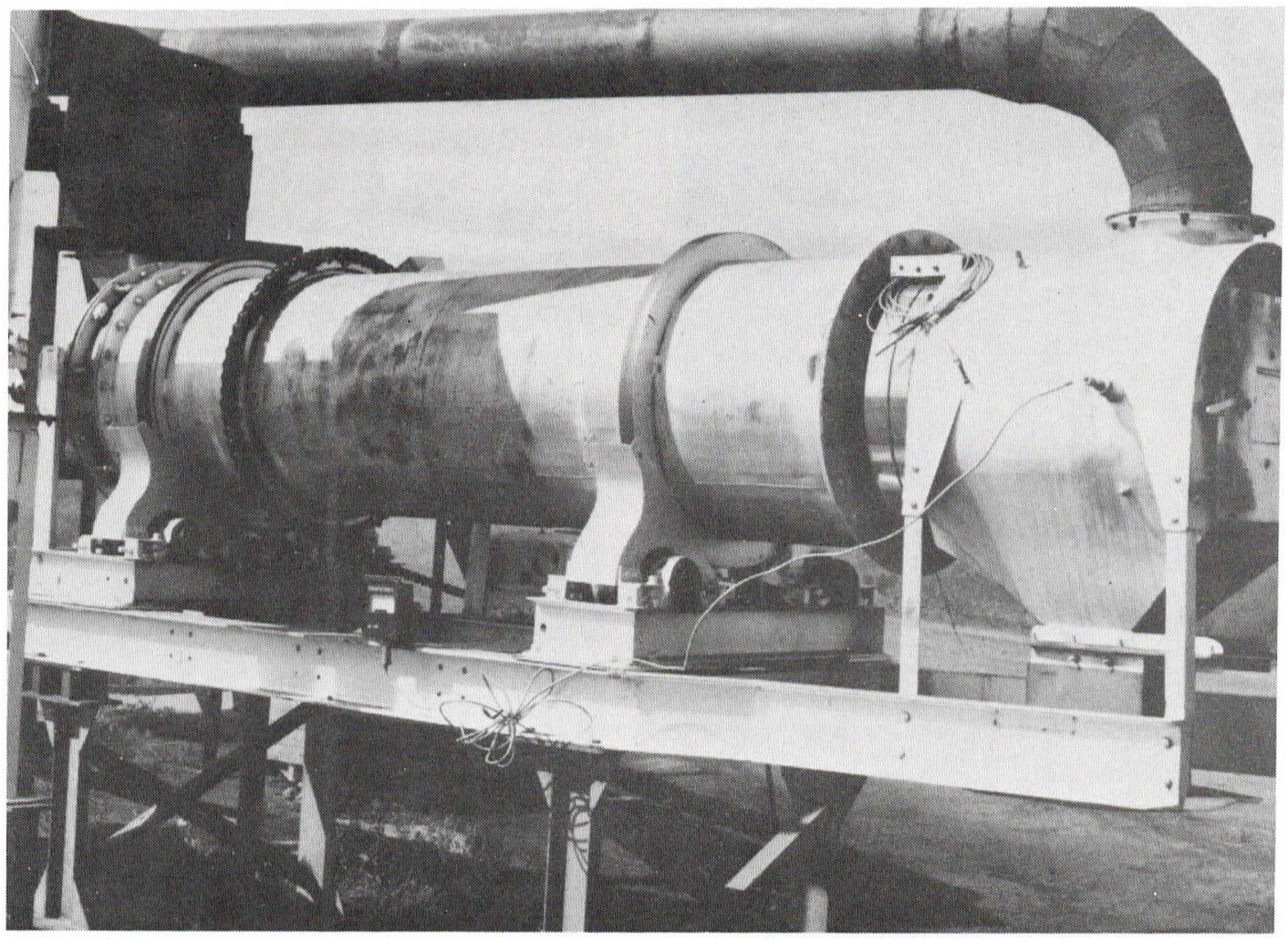
Mr. Blazenko joined the Loram Group in 1971 as Environmental Geologist with Techman Ltd. He was appointed Geological/Environmental Coordinator in 1972 and Manager, Geological/Environmental Programs in 1974. In that capacity, he was responsible for development, coordination and management of base inventory investigations, land use and reclamation planning, impact assessment studies, permitting and licensing requirements and government interfacing related to mining operations in western Canada.



E. J. Blazenko, Vice-President, Operations

Mr. Blazenko received his M.Sc. degree in Geology from the University of Oklahoma in 1964. He is a member of the Association of Professional Engineers, Geologists & Geophysicists of Alberta, a member of the American Institute of Professional Geologists and a member of the American Association of Petroleum Geologists.

Lignite Drying and Briquetting



Drying equipment used on Saskatchewan and Ontario lignite.

This past year Manalta Coal Ltd. in conjunction with Techman Ltd. commenced a research program on improving the heat value and handling properties of lignite coals.

Manalta as operator of the project arranged a contract with Canada-Energy Mines & Resources for partial funding of this initial phase. Techman was requested by Manalta Coal to provide engineering assistance for parts of the study. The two coals experimented upon were Manalta Coal's Estevan and Onakawana (Ontario) lignites.

In the course of this work, lignites from the two sources were dried in a roto-louvre drier (a product of FMC of Canad Ltd.). These tests indicated significant reductions in moisture content could be obtained.

One additional conclusion of the study based on the observed properties of the lignites during the drying process, was that a more efficient type of equipment for drying could be a fluid bed dryer because of the high heat transfer rate measured. Ongoing discussions are being held with manufacturers of this type of equipment with the view to developing a suitable model.

Coupled with the drying study was an investigation into the briquetting properties of the two lignites. It was found, in tests, that the Onakawana lignites could be satisfactorily briquetted without the use of a binder by using a high pressure briquetting unit. However, to obtain satisfactory briquettes with the Estevan lignite it was necessary to mix pitch into the lignite as a binder.

Nevertheless, both processes indicated that a feasible means exists for eliminating the problems of spontaneous combustion encountered with dried lignites, as well as providing a more easily handled and dust-free product for use in thermal power generation.

Pilot scale briquetting tests and further research into lignite drying will be conducted in 1977-78.

The Face Behind The Voice

Joni Hamilton has been Techman Ltd.'s Receptionist since September, 1976. She first joined the Loram Group in 1975 as Secretary/Receptionist with Loram International Ltd. in Rocky Mountain House, Alberta. She was previously employed by Aquitaine Co. of Canada Ltd. as Receptionist.

Born and raised in Renfrew, Ontario, Joni completed her high school education in Drumheller, Alberta.

She is 25 years old, single and enjoys riding, reading, camping and tennis in here leisure hours.

Joni Hamilton, Techman Ltd.'s Receptionist.

Manark Industrial Sales Ltd.

From Compressors To Rainwear

Since it was formed 16 years ago, Manark Industrial Sales Ltd. has evolved from a two-person operation importing and selling everything from sweaters to umbrellas, to a specialized industrial supply company.

F. G. Sheffer, President

Product lines now handled by Manark include compressors, steam cleaners, high pressure washers, pumps, drill presses, lathes, milling machines, smokeless incinerators and a railway crossing system. Supply items available through the company include industrial hose, fittings, grinding wheels, filters, blast hole bits, rainwear, safety supplies, gloves, boots and wire rope.

When Manark joined the Loram Group of Companies in 1961, the company was headed by Victor Fabri, who had a staff of one. A larger staff and more specialized product line now is directed by F. G. Sheffer, President.

As part of the Loram Group, Manark Industrial Sales is geared to meet the requirements for the wide range of industrial products

J. Simpson, Area Manager, B.C. Division

and equipment demanded by the Group's operations. Outside the Group, Manark deals primarily in the construction, mining and forestry industries and with numerous industrial firms throughout western Canada.

Today, an impressive catalog of standard product lines, a busy staff of seven people at the new office and warehouse facilities in Burnaby, B.C. and a staff of two at the branch office in Calgary speak for a successful, growing firm.

G. Rinaldi, Area Manager, Alta. Division

The new office and warehouse in Burnaby, opened February, 1977, have a total area of 6,200 square feet and provide more storage space with greater access to transportation outlets, better delivery service to customers and proximity to suppliers.

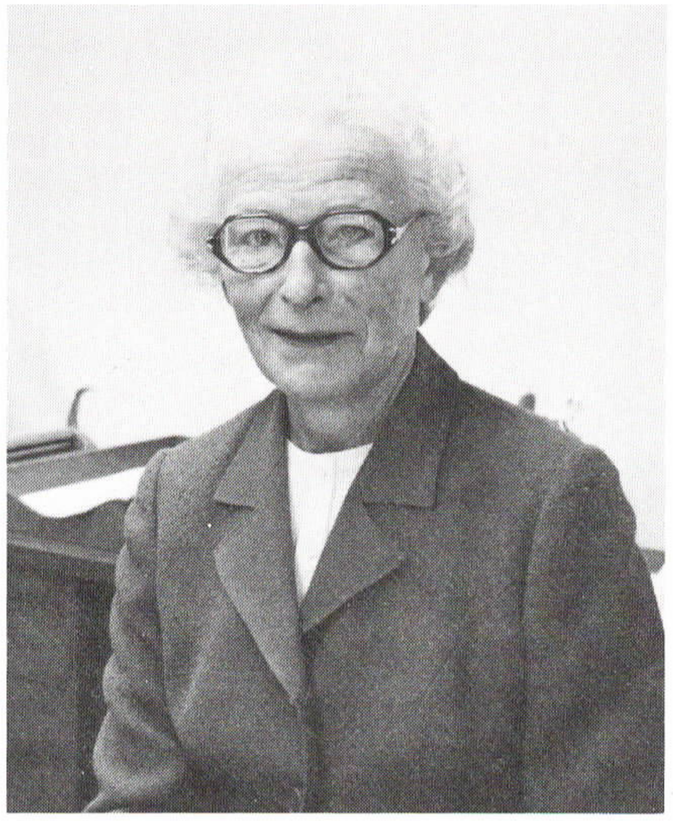
Approximately 30 different product lines are kept in stock and orders can be filled the same day. Items not stocked usually require one day to obtain and deliver. Manark owns and operates a three-quarter ton delivery truck for better service in Vancouver.

L. Tibbles, Sales Manager, B.C. Division

Manark Industrial Sales usually participates in two trade shows a year but this year the company took part in shows in Winnipeg, Calgary and Vancouver. Electro-Magic steam cleaners and high pressure washers highlight the show displays.

Fred Sheffer joined the company in 1974. He was formerly employed by Great West Coal and Manalta Coal Ltd., and has 14 years' Loram Group experience.

Arlene Peacock, Accountant



Frances Robi, Secretary

Aurora DeCastro, Stenographer

Fred is an avid golfer and curler in his spare time. He and his wife Marilyn have four boys.

Also in Manark's Burnaby office is John Simpson, Area Manager, B.C. Division. He joined the Loram Group in 1973 when he worked at Mica Dam for Loram

Warehouse Manager, Max Hughes has been with Manark since September, 1974. He and his wife have a boy and a girl.

Manark's Accountant, Arlene Peacock has worked for the company since September, 1975. She has two daughters and enjoys car-

Alberta Division. He has been with Manark since September, 1975. Gerry is an avid skiier and golfer. He was a member of the Canadian National Ski Team from 1962 to 1970 and competed as a downhill racer in the 1968 Olympics at Grenoble, France. He and

M. Hughes, Warehouse Manager

Manark's office in Burnaby

Nickie Tilley, Secretary - Receptionist

International Ltd. He came to Manark as Area Sales Manager in November, 1975. John coaches PeeWee baseball and Bantam league hockey. He and his wife have a boy and a girl.

Lorne Tibbles, Sales Manager for the B.C. area joined the company in May, 1975. He enjoys golfing in his leisure time.

pentry in her spare time. Frances Robi, Secretary, has been with the Loram Group since 1963 when she worked for Great West Coal and Manalta Coal Ltd. She came to work at Manark in August, 1973. Frances enjoys gardening. Stenographer, Aurora DeCastro has been employed by Manark since September, 1975. She and her husband have a daughter, Bernadette, born April, 1977.

At the Calgary branch office, Gerry Rinaldi is Area Manager,

his wife have one son and one daughter.

Marian (Nickie) Tilley is Secretary/Receptionist at Manark's Calgary office. She is a new employee and has been with the company since August, 1977. Nickie is a former stewardess with Air Canada. She has three children, Karen, Dana and Scott.

Manalta Holdings Ltd.

Property Management & Acquisition

Manalta Holdings Ltd. owns and operates a variety of real estate ranging from farms and ranches to an office building and manufacturing plant. It also provides land management, consulting and property acquisition services.

The company was incorporated in 1966 as a new venture to consolidate the management of properties owned by the Loram Group of Companies.

F. L. Fenwick, President

Manalta Holdings owns the 320 - 7th Avenue Head Office building in downtown Calgary, the Loram Maintenance of Way Building in Hamel, Minnesota, the 1270-acre FM Ranch #2 near Calgary and the 1280-acre Running Bar X Ranch located on the south bank of the South Saskatchewan River, near Medicine Hat, Alberta. It also manages 27,100 acres of surface rights owned by Manalta Coal Ltd. in Alberta and Saskatchewan. In the Calgary area, the company manages 700 acres of agriculture land for other landowners.

At the 320 - 7th Avenue Building, Manalta Holdings acts as landlord for the Loram Group of Companies and three outside firms: The Bank of Montreal, Pay-N-Save Drugs Ltd. and Imco Design Interiors Ltd. which lease space in the building.

Building Superintendent is

H. C. Andersen, Operations Manager

Harold Hedstrom who has worked for the Loram Group since 1936. Hal Maitland, Maintenance Superintendent is Harold's assistant. These two men ensure that building operations run smoothly at all times to provide satisfactory working conditions for over 400 people. The building Security staff is composed of Gordon Tink, who has been with the Group for more than 30 years, Pete Smith, Joe Crasler, Julius

G. R. Campbell, Controller

Lafrentz, John Peremyd and Vivian Vavra.

Manalta Holding's President is F. L. Fenwick whose affiliations with the Loram Group began in 1949. He became President of Manalta Holdings Ltd. in 1970. H. C. Andersen, Operations Manager, joined the company in

Edna Hunt, Executive Secretary

Building and Security Staff, standing, left to right: Hal Maitland, John Peremyd, Julius Lafrentz, Harold Hedstrom. Seated, left to right: Pete Smith, Vivian Vavra, Joe Crasler, Gordon Tink.

September, 1973. Controller G. R. Campbell has been with Manalta Holdings since 1970 and Edna Hunt, Executive Secretary, has 10 years' experience with the Loram Group and joined Manalta Holdings in May, 1976.

At the FM Ranch #2, Manalta Holdings produces wheat, rye, barley and rapeseed. A bird game farm and pheasant shooting ground, located on the ranch, provide pheasants for release on land owned by the Group and other farmers. Ranch Manager is Gordon Diller.

At the Running Bar X Ranch, 650 acres of which are irrigated, grass and alfalfa are raised as feed for the beef cattle herd and the commercial hay market. The herd consists of crossbred Simmental, Hereford and Angus cattle. Ranch Manager is Francis Goller. Ranch Hands are Bob Spence and Ted Lloyd.

Providing agricultural consulting and land management services to other land owners is an extension of the expertise in agriculture and real estate management which Manalta Holdings has accumulated over a number of years.

United Way Target Exceeded By Group

Once again the Loram Group of Companies has exceeded its yearly target for the United Way of Calgary appeal.

Employee contributions are matched dollar for dollar by the companies.

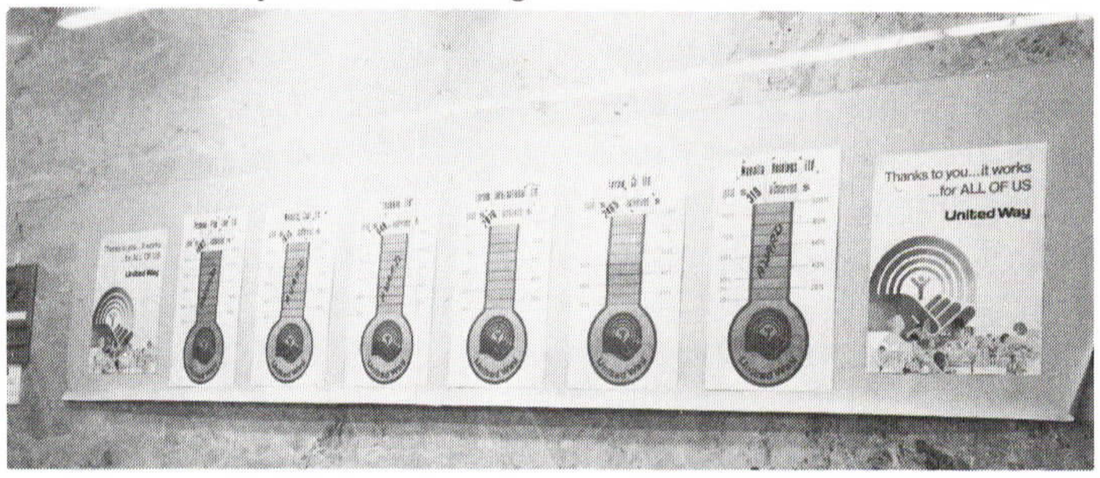
An award is given to a company when 80 percent of its employees contribute on a per capita basis of more than $12.

This year awards will be given to Manalta Coal Ltd., Pembina Pipe Line Ltd. and Manalta Holdings Ltd.

Some of the 37 voluntary community agencies which benefit from your contributions are: Canadian Red Cross, Calgary Cerebral Palsy Association, Canadian National Institute for the Blind, Canadian Paraplegic Association, Young Men's and Women's Christian Associations, Canadian Mental Health Association, Boy Scouts and Girl Guides of Canada.

Out of every dollar contributed, 94.2 percent goes to the agencies.

Above: Angela Key chalks up the percentages for each company.
Below: All companies met their goals.



Exploram Minerals Ltd.

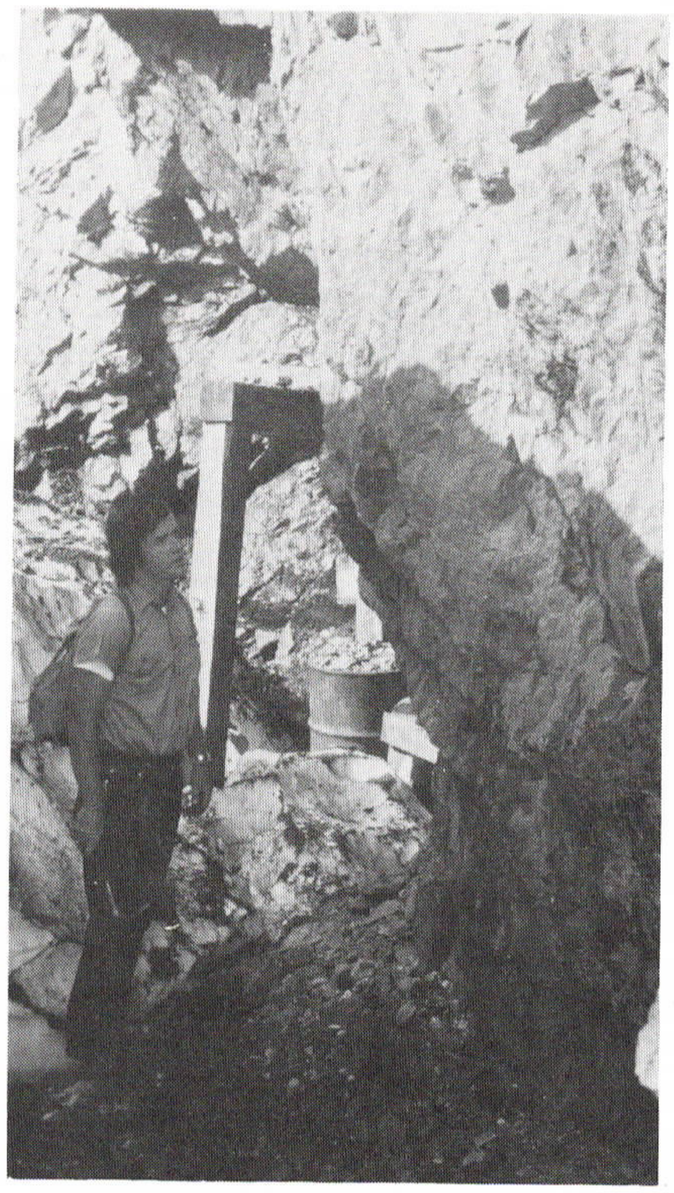
"... to acquire mineral deposits"

Exploram Minerals Ltd., based in Vancouver, is the mineral exploration company of the Loram Group. It was started in 1972 under the name Select Resources Ltd., but in order to become registered in British Columbia a name change was required.

The objective of Exploram Minerals is to identify and acquire mineral deposits, through exploration or other avenues, which will develop into profitable mines. The primary interest is in the base and precious metals such as copper, molybdenum, uranium, tungsten, lead, zinc, silver and gold.

Carl Kamm, President

Three permanent staff members work out of Exploram's office in Vancouver. They are: Carl Kamm, President of the company who joined Exploram at its formation in May, 1972; Ernesto Cruz, Exploration Geologist, who joined Exploram for the 1975 and 1976 field seasons and who was appointed to the permanent staff in the fall of 1976; and Evelyn Gower, Secretary/Receptionist who joined the company in May, 1974. Temporary personnel are employed as required on field work. Professional services are used on geophysical work and other surveys. Contract services



Adit entry partly blocked by previous winters accumulated snow. Ron Esson, former Exploram field man on examination of Eureka Mountain, B.C.

are used for line cutting, access road construction, and diamond drilling. Charter or contract services are used for air transportation to work sites where vehicle access and trail access are neither available nor readily prepared.

Organization of the search for mineral deposits varies from initial exploration to find a prospect to acquisition of mineral prospects already found and brought to the attention of Exploram by prospectors, mining companies, or other individuals.

The first approach of initial exploration to find a prospect involves research of literature, maps, and aerial photographs. This is done in the office to select favourably considered areas geologically. These areas are then explored during the field season which varies but normally, in the early stages, requires that there be little or no snow cover, say from April to October, if the work is in Canada. Exploration crews, including geologists, prospectors and students equipped with suitable maps and exploration tools, are dispatched to these preselected areas and their systematic search begins. The search ranges from the old

Evelyn Gower, Secretary/Receptionist

fashioned pick and shovel visual approach through to the application of field geology, geochemistry, and geophysics.

Once base metal mineralization or metal anomalies (unusual concentration of metals in silt, soil or rock) are found, ground is acquired through claim staking. Follow-up work, which consists of detailed geochemistry, geophysics, and geological mapping of both mineralization and

rock types is conducted to delineate the potentially mineralized part of the ground. A diamond drilling program is then started to determine the size and grade of the mineralized area. This step usually determines whether or not a mine is in the making.

Atomic absorption instrument used to assay samples in the laboratory.

The second approach is in the examination of known mineral prospects submitted to Exploram either by other companies seeking joint venture programs or by prospectors requiring financial help to determine the mineral potential of their ground. These examinations consist of detailed scrutiny of the exposed mineralization and geological setting, together with sampling of the mineralized rock for assaying. Should the examiners feel the prospect has potential economic mineral concentration, an option agreement will be proposed. If the proposal is acceptable to both parties, an agreement will be prepared and further exploration work is then pursued.

During either the examination or the exploration program, field crews will do additional sampling of the mineralized rocks, soils, stream silts, or drill core as development proceeds, and ship the samples directly to a laboratory for assaying. At the laboratory, samples are crushed, pulverized, screened, weighed, and analyzed for the requested metals. The assay methods vary from chemical testing or fire assaying to highly specialized methods using spectrographic or atomic absorption instrumentation.

Minerals are inorganic substances occurring naturally in the earth and having a consistent and distinctive set of physical properties. They usually occur as crystalline structures with compositions that can be expressed by a chemical formula. Ore is any natural combination of minerals from which a metal or metals can be profitably extracted. Man has been mining and looking for ore bodies for thousands of years and exposed new ore occurrences are becoming both rare and unique. The new ore discoveries are mostly hidden by overburden or other cover and thus require more sophisticated methods than in the past to find them.

During the regular field season, the assay laboratories process many samples and mail the results to the Exploram office for relaying to the field crews. The results are plotted on maps to provide an up-to-date progress picture and guide follow-up work which, where justified, will lead to diamond drilling and other development work.

If you are rewarded in your search by discovering a mineral deposit which is developed into a profitable mine and you follow the normal progression of exploration steps from initial reconnaissance in a favourable area through discovery to production, you could be looking at a time span of between five and ten years. The ingredients of success seem to be in a coordination of persistence, determination, knowledge and capital, stirred long enough to bring the missing ingredient, Lady Luck, on the scene.

Mining Division Manager Appointed By LIL

G. M. Strmotich has been appointed Manager, Mining Division of Loram International Ltd.

G. M. Strmotich, Manager, Mining Division.

Mr. Strmotich joined the Loram Group in 1963 as a student engineer and has served in various capacities in head office and on field projects. His responsibilities have taken him to many parts of Canada, Japan, Australia and the United States on construction, engineering and mining assignments.

He brings to this position an in-depth knowledge of the mining environment in the Alberta oilsands and the coal industry derived from direct involvement in these areas.

Mr. Strmotich has worked in the capacity of Chief Engineer, Manalta Coal Ltd., Senior Mining Engineer Fluor-Utah Ltd. and most recently as Assistant Manager, Mining Division, Loram International Ltd.

Mr. Strmotich graduated from the University of Saskatchewan in 1965, is a member of the Association of Professional Engineers, Geologists and Geophysicists of Alberta, the Canadian Institute of Mining and Metallurgy and the American Institute of Mining Engineers.

Repairs to Tunnel At Terrace Completed

Tunnel repairs undertaken by the General Contracts Division of Loram International Ltd. for the CNR at mile 121.9 in the Bulkley subdivision near Terrace, B.C. have been completed.

Loram International's crews began work on the line in early September. Work included drilling of relief holes in the tunnel's walls and roof, chipping loose rock and concrete, installing of a drainage system inside the tunnel and placing of pneumatically applied concrete to finish the tunnel.

The crews were transported daily by rail to the tunnel located approximately 10 miles east of Terrace. Project Manager was Charlie Allan and Superintendent was Bill Sears.

North Starter Dyke Completed

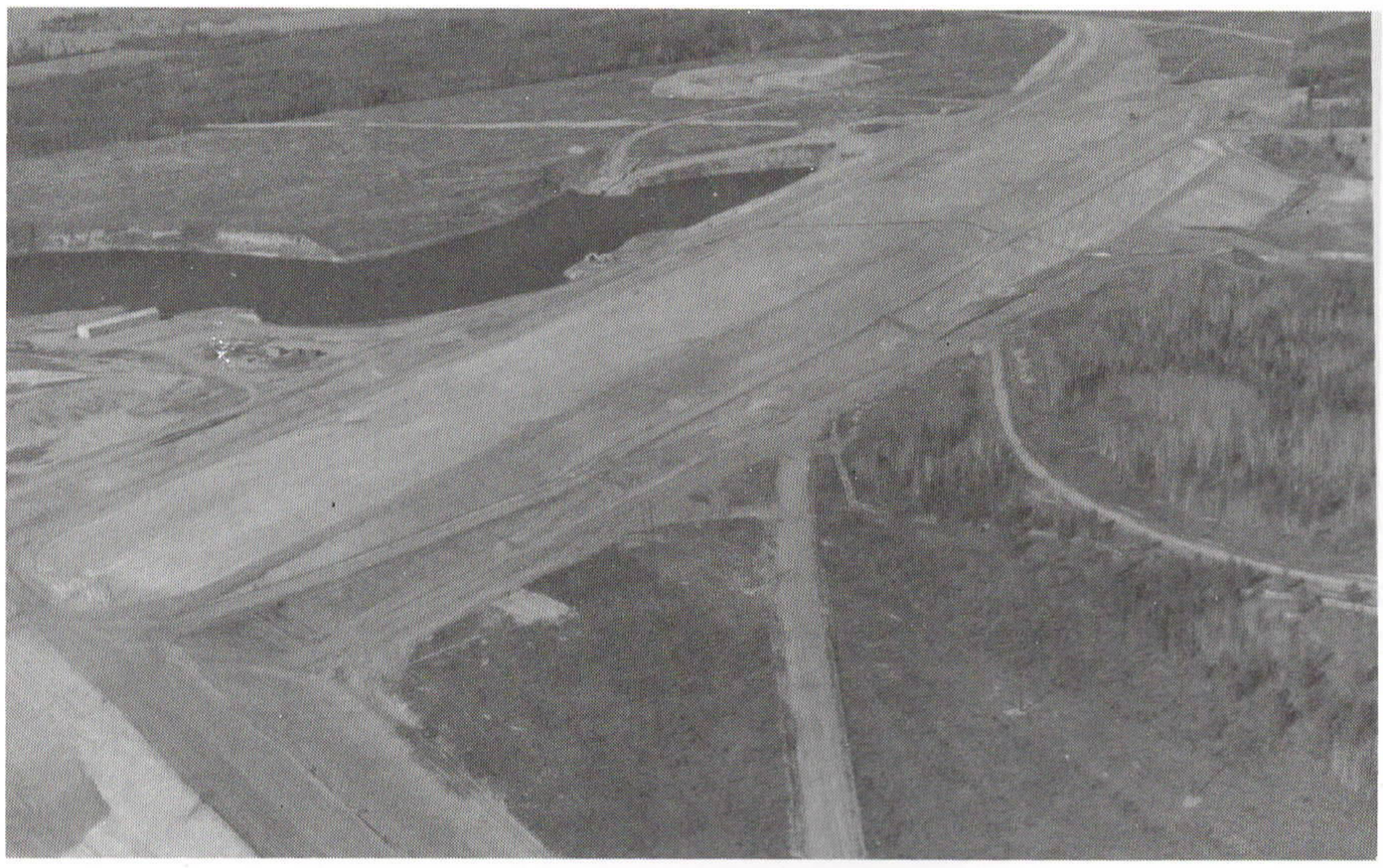
Syncrude Canada Ltd.'s North Starter Dyke, built by the General Contracts Division of Loram International Ltd. has been completed.

Located at the Mildred Lake site, north of Fort McMurray, Alberta, the dyke was completed the end of August, ahead of schedule.

A total of 10 million cubic yards of clay, sand and gravel was moved in 11 summer months between May, 1976 and August, 1977. The project was shut down during the winter months. Three separate phases of the dyke were awarded. Equipment included 24 scrapers, four off-highway trucks, 14 tractors, three graders, one loader and eight compactors.

A pumping system designed and built by Loram International Ltd., and used to divert Beaver Creek over the dam remained with Syncrude for their dewatering requirements.

All personnel involved with the job have been reassigned to other projects and the office group has moved to Calgary to finalize accounting.



Above: General view of Syncrude Plant with mining area in the foreground. Below: Aerial view of the North Starter Dyke with Beaver Creek shown at left.

Lorcan Co. Ltd. Activated

Lorcan Co. Ltd. has been activated as a project management services company in the Loram Group.

Lorcan Co. Ltd. will provide to a client the management services which will permit the client to put into operation a project whose concept is sufficiently important financially to warrant either further study, or to put directly into service.

R. D. Boivin, Vice-President and General Manager

President of the new company is S. C. Waters. R. D. Boivin is Vice-President and General Manager; W. G. B. Gant is Vice-President, Operations; J. A. Eddleston is Manager, Planning and Control; J. LaFitte is Personnel Manager and Charmaine Reid, Receptionist and Secretary.

Types of services to be provided by Lorcan Co. Ltd. include: conceptual studies based on a resource; optimization studies based on a concept; translation from concept to project plan study; translation of a project plan to a definitive project plan and evaluation; translation from a

J. A. Eddleston, Manager, Planning and Control

definitive project plan study to a site selection study; site optimization studies; project planning including financial evaluation and financing studies; preparation of financing documents for project financing; project planning of a financed project; and project management of a financed project.

Lorcan will be able to call upon,

J. LaFitte, Personnel Manager

and organize, all of the many disciplines available within the Loram Group of Companies.

Charmaine Reid, Secretary/Receptionist

Lorcan Appoints Vice-President, Operations

The appointment of W. G. B. Gant as Vice-President, Operations of Lorcan Co. Ltd. was recently announced by Loram President, S. C. Waters.

W. G. B. Gant, Vice-President, Operations

Mr. Gant, formerly Senior Construction Manager, Pipeline with Canadian Arctic Gas Study Ltd. brings to his new position almost 30 years' experience in the oil and pipeline industries. He was employed by Beaufort Delta Oil

Project Ltd. as Construction Manager, as Project Manager for Price-Potashnik-Codell-Oman, responsible for construction of a section of the Alyeska Pipeline and is a Past President of H. C. Price of Canada Ltd.

Mr. Gant has worked in Australia, South Africa, the United States, Canada, Western Europe and the Middle East. He received his post-secondary education at the Montana School of Mines and LaSalle Extension University.

Mr. Gant is a member and Past President of the Pipeline Contractors Association of Canada and a member of the Canadian Standards Association.

Chapel Appointed Assistant Operations Manager

The appointment of G. D. Chapel as Assistant Operations Manager of Manalta Coal Ltd. was recently announced by Manalta Operations Manager, D. Kingdon.

Mr. Chapel joined the Loram Group of Companies in 1964 as a summer student and later became Junior Engineer. He was appointed Staff Engineer, Loram Co. Ltd. in 1969. Following a stint with Loram Maintenance of Way, Mr. Chapel was transferred to the Railroad Division of Loram International Ltd. He was promoted to

G. D. Chapel, Assistant Operations Mgr.

Chief Engineer of Manalta Coal Ltd. in 1973, a position he held for three years.

Help Wanted

We are planning a movie tracing the history of the Group Companies, and of the industries they serve, from 1898 to the present. While many facts are available to us through company and outside files, much of the most useful information may well be in the possession of the people who have been associated with the Group for a period of time. We are looking for anecdotes of Loram people at all levels, and of jobs and projects, big and small. The anecdotes can date from yesterday to as far back as a reliable memory can take the teller. If you have a story you can write it out, or come in to the Public Relations Department on the 10th floor of Head Office building and tell it to us in person. Clippings or other published material will also be welcome, as will photographs, particularly of people.

All photographs and printed material will be returned, undamaged.

The Public Relations Department

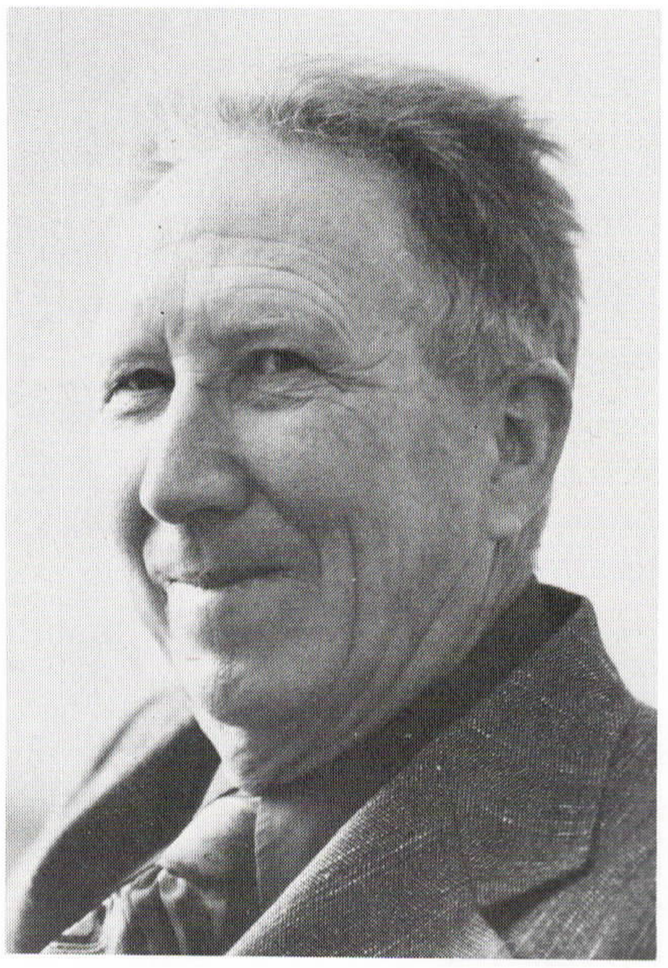
Training Coordinator Named By Manalta Coal

Roy McBride, formerly Vesta Mine Manager has been appointed Training Coordinator for Manalta Coal Ltd.

His duties will include planning, organization and supervision of training programs for equipment operators and mine supervisors.

This appointment is in response to the expanded scale of mining Manalta Coal Ltd. is undertaking and to the continuing need for safe and efficient mine operations.

Mr. McBride has more than 20 years' experience with the Loram Group of Companies.



Roy McBride, Training Coordinator

Strathcona - Tweedsmuir Excavation Completed

A site grading and basement excavation contract for the extension to the Strathcona - Tweedsmuir school at Okotoks, Alberta has been completed.

The project was undertaken by the General Contracts Division of Loram International Ltd. Basement excavation was supervised by Lorne Berg of the Engineering department and site grading was supervised by Kim Cline, formerly Project Manager of the North Starter Dyke project.

Safety Message

Time to Winterize

Okay, let's go over your "winterizing" check list again: you've put on snow tires, added anti-freeze and changed the oil in your car; you brought in the barbecue and lawn chairs; you bought overshoes for yourself, and new coats, scarves and mittens for the kids.

That's a good start, but the Calgary Fire Department strongly suggests that your winterizing program also include a seasonal safety check. Items:

— Have your furnace cleaned and checked. Replace dirty filters.

— Don't forget the fireplace. Cleaning the chimney may be a professional job, but neglecting it could turn your whole home into a hearth.

— If you use a portable heater, keep it at a safe distance from anything that could burn.

— Dispose of all trash, including old clothing, furniture, paper and rags.

— Check and replace all worn or frayed electrical cords from lamps, applicances and Christmas decorations.

— Look outside your house, and make sure it is free of dead grass, weeds, trash or dried brush.

— If your garage is heated, don't fill your car with gas before parking it there. Cold gas will expand and possibly spill or vaporize in a heated garage. That's dangerous.

— AT CHRISTMAS, besides checking your lights for frayed wires, broken sockets and loose connections, you should:

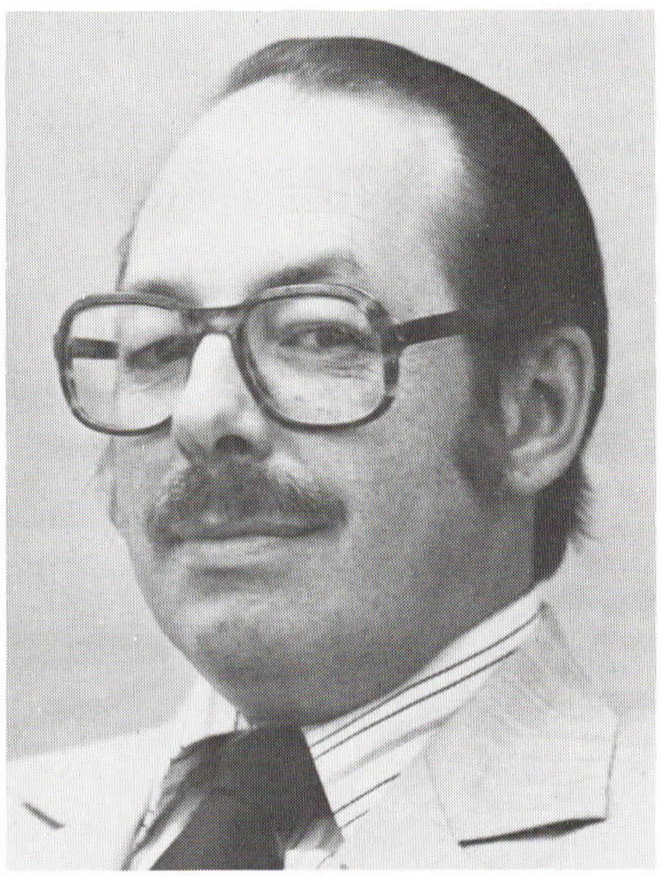
— Keep the base of your natural tree in water, place it away from heat, and see that it doesn't block an exit. If it's a plastic tree, check for a fire-retardant label. If it's a metallic tree, use only indirect spotlighting as lighting sets pose an electric shock hazard. Trees with a built-in electric system should carry the label of a testing agency.

— For decorations, use only flameproof of non-combustible materials.

— Finally, dispose of gift wrappings properly and safely, not in the fireplace.

Stevenson Appointed Vice President, Coal

The appointment of Allan G. Stevenson as Vice-President, Coal, Loram Co. Ltd., was recently announced by Loram President, S. C. Waters.



A. G. Stevenson, Vice-President, Coal

Mr. Stevenson, formerly Manager, Mining Division of Loram International Ltd., brings to the position 17 years' experience in engineering, development, mine planning, management, computer methodologies and programing. He has worked extensively in coal, gold and copper mining.

Mr. Stevenson received his B.Sc. degree in Geological Engineering in 1960 from the University of Manitoba. He is a member of the Corporation of Engineers of Quebec, a member of the Canadian Institute of Mining and Metallurgy, a director of its Calgary branch, councillor for District #5 of the national organization, and a member of the American Institute of Mining Engineers.

Mr. Stevenson joined the Loram Group of Companies in 1974

Rail Grinder At Work On Quebec Cartier Railway

One of Loram Maintenance of Way's 24-Stone Rail Grinders is celebrating its first year of operation on the Quebec Cartier Railway. The Rail Grinder was delivered to the railway November, 1976 under the terms of an annual lease and has proved very successful in maintaining the level of rail corrugation on the heavy tonnage iron ore railroad.

The Quebec Cartier Railway annually ships more than 45 million gross tons of freight, and as a result the rail develops definite corrugation or wave pattern much like the washboard effect on highways.

Since being installed, the Loram 24-Stone Rail Grinder has consistently averaged metal removal at the rate of .004 inches per pass.

Canadian National Railways' Chief Engineer, Ron Bailey; R. A. Peppin, President of Loram Maintenance of Way and R. D. Boivin, Vice President, Construction of Loram Co. Ltd. had an opportunity to visit the Rail Grinder in operation this summer.

Loram Maintenance of Way currently has in operation in the Edmonton area a 36-Stone Rail Grinder capable of removing .006 to .008 inches of metal per pass.

Mica Dam Signals New Era

The dedication ceremony for B.C. Hydro's Mica Dam Project at the dam site October 13, marked the successful completion by Loram International Ltd.'s Heavy Construction Division.

Back row, left to right: C. L. Robertson, P. J. Quinton and D. K. Anderson.

More than 600 people attended the ceremony in the underground powerhouse located 135 kilometers north of Revelstoke, B.C. on Highway 23.

At the ceremony, W. A. C. Bennett, former premier of B.C. noted the dam "signals the end of an era and the beginning of a new era in energy development in the province."

Loram International Ltd.'s job involved the excavation of almost one million cubic yards of rock, placing of 225,000 cubic yards of concrete, 165,000 cubic yards of which was underground, 600,000 linear feet of rock bolts and the installation of four turbine-generator units, with the provision for two additional ones in the future.

Loram crews mobilized for the contract April, 1973. At peak period during the summer and fall of 1974, more than 1,500 men worked at the job site. All critical completion dates were met and all bonuses were earned.

Loram International Ltd. was represented at the podium by Mr. F. C. Mannix.

Front row, left: F. C. Mannix

Quarter Century Of Service Honored

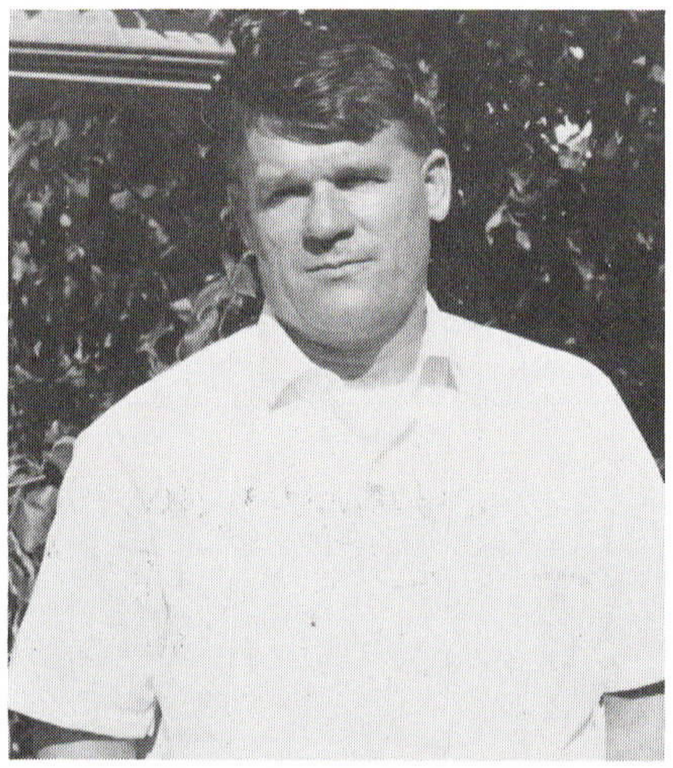
J. S. (Bill) Ward, a mechanic at Loram International Limited's Ogden Shop in Calgary, was honored at a recent luncheon marking his 25 years of service

J. S. (Bill) Ward

with the company. Bill joined the company in 1952 as an oiler at the Morley Crushing project, and spent some time on other short jobs. The following year he became an apprentice mechanic at the Calgary Shop, and in 1955 received his journeman papers. Since then, with the exception of about a year at the Brazeau Storage Development, and some time on the Hinton Railroad Grade project, he has worked mainly at the shop. Those attending the luncheon, and congratulating Bill on his quarter century of service, were Dil Robertson, Jim Quinton, Lee Morrison, Charlie Thalheimer, Ben Kessler, Gordon Coates and Della McNulty from Head Office, and Bud Burke from the Shop.

IN MEMORIAM

Emil Cecil Jenish, an employee of Manalta Coal Ltd. passed away October 21, 1977 at the age of 50.



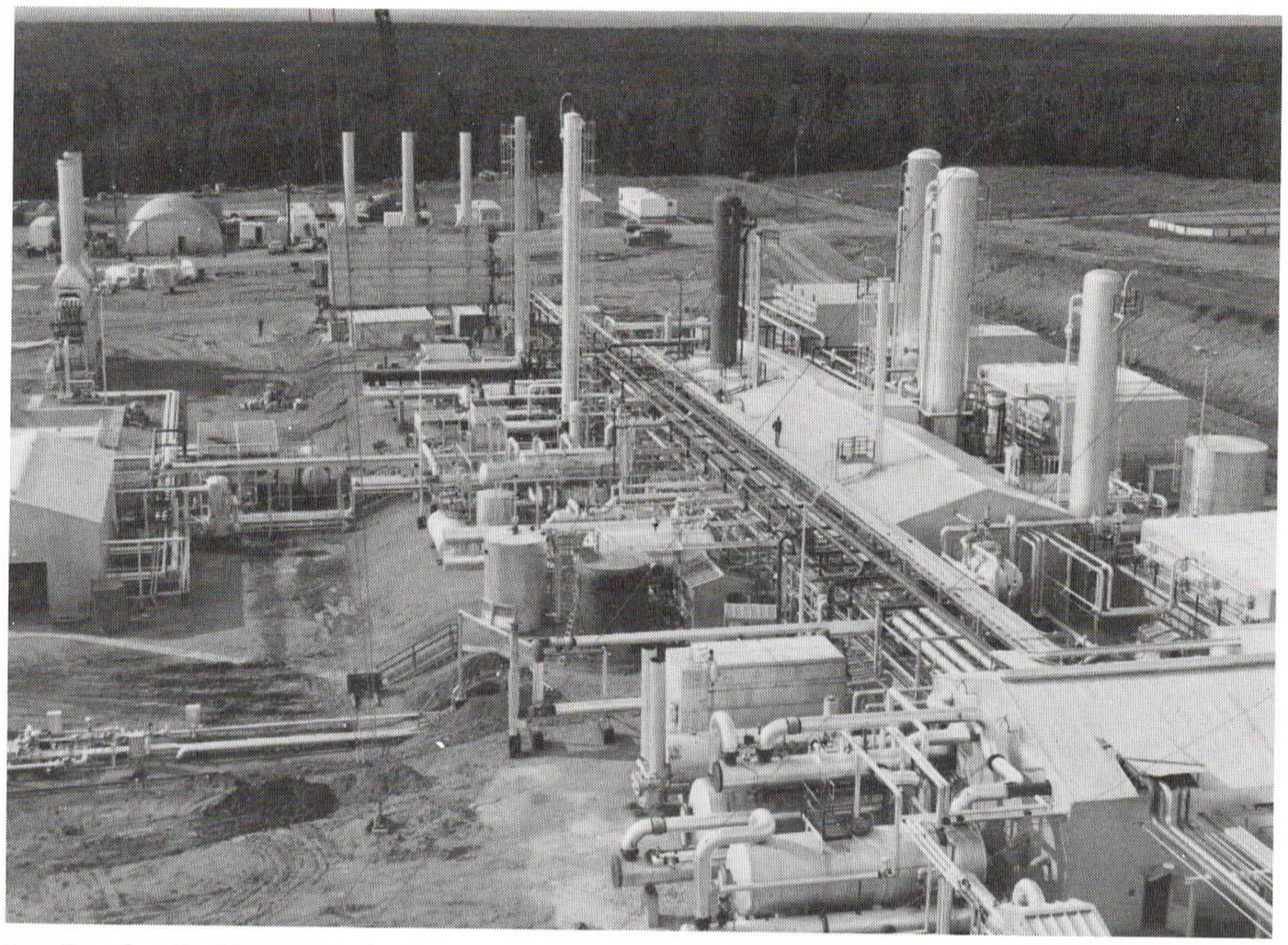
Emil C. Jenish

Mr. Jenish joined the Loram Group of Companies in 1956 as Foreman of Great West Coal. He was Shop Foreman at the Klimax Mine in Estevan, Saskatchewan when Great West became known as Alberta Coal Ltd. in 1965. Mr. Jenish was promoted to Master Mechanic in 1971. He later became Foreman at the Klimax Mine.

His dedication at all times is remembered by fellow workers and employees of Manalta Coal Ltd. Mr. Jenish is survived by his wife Edna, daughters Ellen, Sherrie, Jeyne and Brenda and his son Brian.

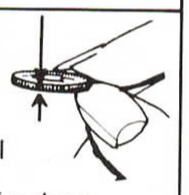
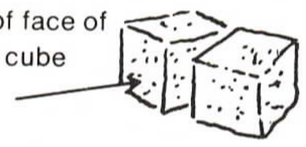
Winter Drilling

As the "freeze sets in, drilling rigs begin the trek to the remote areas of Western Canada, which are inaccessible or environmentally sensitive to summer operations. For many months prior thereto, the Pembina exploration and engineering staffs have been planning for the winter drilling program. The Pembina-Decalta team expects to participate in the drilling of 40 or 50 wells by spring break-up. While most of the wells will be located in Alberta and British Columbia, others will be as far away as the waters offshore Louisiana . . . "bon chance, drillers!"



Previously shut-in natural gas reserves at Brazeau River, will add to both Pembina and Decalta revenues. Production from these wells will be delivered to the Brazeau River Gas Plant some 11 miles to the west where it will be stripped of the condensates and sulphur; the residue gas will then be delivered to market.

Some Common Metric Units

Quantity	Unit	Symbol	Examples (approximate)
Length	millimetre	**mm**	**1 mm** about the thickness of a dime 
	centimetre	**cm**	radius of a nickel
	metre	**m**	half the height of a door
	kilometre	**km**	length of a brisk 10 min walk
Area	square centimetre	**cm²**	area of face of sugar cube 
	square metre	**m²**	area of 2 open sheets of the Globe and Mail
	hectare (10 000 m²)	**ha**	area of a football field including the end zones
	square kilometre	**km²**	area of about 35 city blocks
Volume	cubic centimetre	**cm³**	little less than volume of sugar cube
	cubic metre	**m³**	exterior volume of full sized refrigerator
	millilitre	**mL**	smallest kitchen measure
	litre	**L**	volume of a one pound coffee can 4 paper coffee cups when full hold about **1L** (litre)
	kilolitre	**kL**	little more than the volume of two - 100 gallon drums

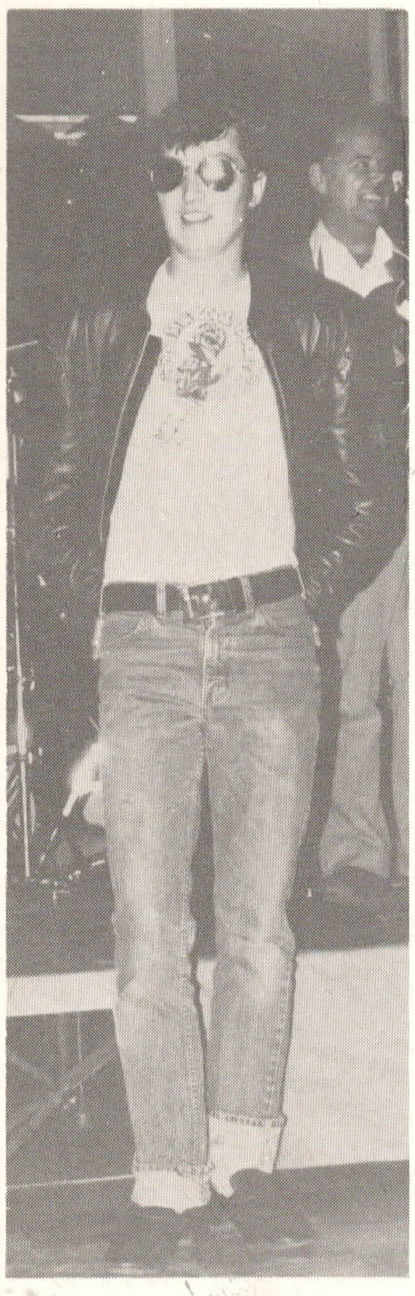
Quantity	Unit	Symbol	Examples (approximate)
Mass (often called "weight")	gram	**g**	mass of a paper clip or thumb tack A telephone receiver has a mass of **300 g**
	kilogram	**kg**	**2 kg** mass of a desk telephone
	† tonne or metric ton	**t**	a compact car has a mass of about **1 t**
Temperature	degree Celsius	**°C**	water freezes at 0°C room temp. is about 20°C normal body temp. is 37°C water boils at 100°C
Speed	kilometre per hour*	**km/h**	30 mph is about 50 km/h 50 mph is about 80 km/h
Time	second	**s**	These will be used as in the past.
	minute*	**min**	1 min = 60 s
	hour*	**h**	1 h = 60 min
	day*	**d**	1 d = 24 h
Angle	degree*	**°**	1 revolution = 360°

Chart by Metric Promotions.

**Non-metric units permitted for use with SI (Le Système International d'Unités) — their symbols are accepted internationally.*

+ 1 Mg (megagram) = 1 000 000 g = 1 000 kg = 1 t (tonne or metric ton).

Annual MEGA Hallowe'en Party



Lloyd Privett

Left to right: Russ Robinson, Golda Evernden, Cliff and Diane Blumhagen, Mary and Murray Blackmore, Vicki Davis and Andy Clements.

Left to right: Barbara Waters and A. H. Ross

The annual MEGA Hallowe'en Party was held at the University of Calgary Dining Centre, October 28th.

The accompanying photos are a glimpse at the varied interpretations of the party's theme, "Nostalgia Hop".

Left to right: Leslie Petrie and Nancy Lowe. Standing: June Baril.

Left to right: June and Noel Phillips

Above, left to right: Cliff Blumhagen and Murray Blackmore. Below, left to right: Joan Ross and S. C. Waters.

Left to right: Marilyn Robinson and Jim Scott.

Left to right: Howard Tidswell and R. N. Mannix

The Loram Group Directory

Techman Ltd.
320 - 7th Ave. S.W., Box 2840,
Calgary, Alta. T2P 2M7 ..... (403) 267-6270

Exploram Minerals Ltd.
1004 - 510 West Hastings St.,
Vancouver, B.C. V6B 1L8 ..... (604) 682-8595

Manalta Holdings Ltd.
320 - 7th Ave. S.W., Box 2550,
Calgary, Alta. T2P 2M7 ..... (403) 267-5320

Manark Industrial Sales Ltd.
8170 Winston St., Burnaby, B.C. V5H 2H5 ..... (604) 294-6633
Prairie Division:
1021 Macleod Tr. S., Calgary, Alta. T2G 4V2 .. (403) 263-8610

Pembina Pipe Line Ltd.
320 - 7th Ave. S.W., Box 1948,
Calgary, Alta. T2P 2M7 ..... (403) 267-5411
Drayton Valley Office:
P.O. Box 330, Drayton Valley, Alta. T0E 0M0 . (403) 424-5012
Redcliff Office:
P.O. Box 579, Redcliff, Alta. T0J 2P0 ..... (403) 548-3848

Western Decalta Petroleum (1977) Limited
320 - 7th Ave. S.W., Box 2404,
Calgary, Alta. T2P 2M7 ..... (403) 267-5112

Loram Maintenance of Way Inc.
3900 Arrow Head Drive,
Hamel, Minnesota 55340 ..... (612) 478-6014

Gregg River Resources Ltd.
320 - 7th Ave. S.W., Box 2880,
Calgary, Alta. T2P 2M7 ..... (403) 267-6202

Manalta Coal Ltd.
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Calgary, Alta. T2P 2M7 ..... (403) 267-5311

Highvale Mine Office
P.O. Box 30,
Seba Beach, Alta. T0E 2B0 ..... (403) 797-3827

Whitewood Mine Office
Wabamun, Alta. T0E 2K0 ..... (403) 892-2215

Roselyn Mine Office
Sheerness, Alta. T0J 1P0 ..... (403) 854-2385

Vesta Mine Office
Halkirk, Alta. T0C 1M0 ..... (403) 884-2234

Klimax Mine Office
P.O. Box 490,
Estevan, Sask. S4A 2A5 ..... (306) 634-4233

Utility Mine Office
P.O. Box 760,
Estevan, Sask. S4A 2A6 ..... (306) 634-3433

Saskatchewan Area Office ..... (306) 634-4233

Great West Coal Sales
320 - 7th Ave. S.W., Box 2880,
Calgary, Alta. T2P 2M7 ..... (403) 267-5366
444 Grain Exchange Building,
167 Lombard Ave., Winnipeg, man. R3B 0T6 ... (204) 942-8557
521 - West 8th Ave., Vancouver, B.C. V5Z 1C6 .. (604) 872-1010

Onakawana Development Ltd.
600, 55 University Ave., Toronto, Ont. M5J 2H7 (416) 862-8029

Loram International Ltd.
320 - 7th Ave. S.W., Box 2828,
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Shops and Warehouse:
3201 Ogden Road S.E.,
Calgary, Alta. T2G 4N4 ..... (403) 267-5457
After Hours ..... (403) 271-6497
(403) 266-6643
Edmonton Office:
604, 10201 - 104th St.,
Edmonton, Alta. T5J 1B2 ..... (403) 424-8276
Montreal Office:
5000 Fairway St.,
Lachine, Quebec H8T 1B6 ..... (514) 482-7795

Loram Co. Ltd.
320 - 7th Ave. S.W., Box 2550,
Calgary, Alta. T2P 2M7 ..... (403) 267-5333
Aviation Division:
Hangar 58, McCall Field, Calgary, Alta. ..... (403) 277-0717

Lorcan Co. Ltd.
320 - 7th Ave. S.W., Box 2550,
Calgary, Alta. T2P 2M7 ..... (403) 267-5194

Safety Is Our Style